

WHAT IS CLAIMED IS:

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1. An image processing apparatus, comprising:
  - a) input means for inputting consecutive image data;
  - 5        b) dividing means for dividing the image data into blocks each constituted of a plurality of pixels;
  - c) detecting means for detecting a motion vector of each block;
  - d) judging means for judging a border block in  
10       accordance with the motion vector detected by said detecting means, the border block forming a boundary area between an object area and a background area corresponding to a background of the object area; and
  - e) extracting means for extracting image data in  
15       the object area in accordance with the border block judged by said judging means.
2. An apparatus according to claim 1, wherein  
20       said judging means judges the border block in accordance with an occurrence frequency of the motion vector detected by said detecting means.
3. An apparatus according to claim 2, wherein  
25       said judging means classifies blocks into the border block, an object block corresponding to the object area, and a background block corresponding to the background area.

4. An apparatus according to claim 3, wherein  
said judging means judges a block from which the motion  
vector having a first largest occurrence frequency was  
detected, as the background block, and a block from  
5 which the motion vector having a second largest  
occurrence frequency was detected, as the object block.

5. An apparatus according to claim 4, wherein  
said judging means judges a block from which the motion  
10 vector having a third or more largest occurrence  
frequency was detected, as the border block.

6. An apparatus according to claim 3, wherein  
said judging means judges a block from which the motion  
15 vector having a first largest occurrence frequency was  
detected, as the background block, and a block from  
which the motion vector having a second or more largest  
occurrence frequency was detected and being adjacent to  
the background block, as the border block.

20 7. An apparatus according to claim 3, wherein  
said judging means judges a block from which the motion  
vector having a second largest occurrence frequency was  
detected, as the object block, and a block from which  
25 the motion vector having a first more largest  
occurrence frequency was detected and being adjacent to  
the object block, as the border block.

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18. An apparatus according to claim 15, further comprising recording means for recording the image data encoded by said encoding means in a storage medium.

5 19. An image processing method comprising the steps of:

- a) inputting consecutive image data;
- b) dividing the image data into blocks each constituted of a plurality of pixels;
- 10 c) detecting a motion vector of each block;
- d) judging a border block in accordance with the detected motion vector, the border block forming a boundary area between an object area and a background area corresponding to a background of the object area;
- 15 and
- e) extracting image data in the object area in accordance with the judged border block.

20 20. A storage medium storing program codes for image processing steps, the program codes comprising:

- a) codes for an input step of inputting consecutive image data;
- b) codes for a dividing step of dividing the image data into blocks each constituted of a plurality of
- 25 pixels;
- c) codes for a detecting step of detecting a motion vector of each block;

e) codes for an extracting step of extracting image data in the object area in accordance with the border block judged by the judging step.